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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,601	01/16/2004	Kyle Jeffrey Charlet	SVL920030101US1	8692
45112 7590 12/29/2006 KUNZLER & ASSOCIATES 8 EAST BROADWAY SUITE 600 SALT LAKE CITY, UT 84111			EXAMINER BLACK, LINH	
			ART UNIT 2163	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			12/29/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/759,601

Applicant(s)

CHARLET ET AL.

Examiner

LINH BLACK

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

This communication is in response to the Applicants' Response dated 9/25/06. Claims 1-20 are pending in the application. Claims 1, 13, and 18 are independent claims.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Call (US 20020143521).

As per claim 1, Call teaches a hierarchical database – pars. 0011, 0055, 070-0073; a metadata schema derived from the hierarchical database – pars. 0067, 0073, 0120. metadata schema comprising a first representation of the hierarchical structure of the hierarchical database, and second representation...of the hierarchical structure of XML documents – pars. 0066-0067, 0073-0074, 0115. passing data between an XML document and the database using the schema – pars. 0067, 0073.

As per claim 2, Call teaches XML elements organized according to the metadata schema – pars. 0034, 0044, 0067, 0070, 0117; matching... - pars. 0073, 0089, 0102, 0297-0298; storing content data... - pars. 0072, 0075, 0108.

As per claim 3, Call teaches storing a sub-tree of the XML document...and XML root element and one or more XML descendent elements – pars. 0018, 0023, 0070, 0091.

As per claims 8-9, Call teaches receiving a key that uniquely identifies the XML documents – pars. 0253, 0297-0298; locating a first database...identified by the key – pars. 0054, 0253, 0297-0298, 0305; retrieval of XML document – pars. 0072-074, 0265 ; root and subtrees – pars. 0018, 0023, 0070, 0091.

As per claims 10-11, Call teaches XML data type identifier that maps to the database field type identifier; XML schema, – pars. 0038-0047, 0067, 0070-0073, 0115.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Call (US 20020143521), and further in view of Pic et al. (US 6988093).**

As per claim 4, Call teaches databases – par. 0265; XML documents and schemas – pars. 0067-0068, 0072; storing XML documents into hierarchical database - pars. 0072, 0075, 0108. However, Call does not explicitly disclose break point in the XML document. Pic et al. teach process for indexing, storage and comparison of multimedia documents – the title; segmenting the original multimedia document into components that are more elementary including XML descriptions – col. 18, lines 1-8; each node represents a characteristic which can be considered as being elementary at the corresponding level of breakdown in the hierarchy – col. 3, lines 19-62; col. 7, line 60 to col. 8, line 20. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Call's and Pic's teachings to better manage databases because each can represent a different characteristic/category of data thus, facilitating information searching and retrieval.

As per claim 5, Call teaches examining each XML document ... - pars. 0031, 0046-0047, 0068, 0089, 0130; storing an index value from an XML element ... - pars. 0213, 0235, 0238-0239; generating a secondary index... - pars. 0089, 0130, 0361.

As per claim 6, Call teaches receiving a query for the XML document – pars. 0069, 0071; storing an index value... - pars. 0021, 0031, 0213; matching ... - pars. 0076, 0089, 0102, 0128, 0195; generating an XML element..., and assembling the XML elements

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into the XML document – pars. 0076, 0265, 0300, 0323-0324. However, Pic et al. further improve Call's teaching of assembling for retrieval at col. 9, line 23 to col. 10 line 29. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Call's and Pic's teachings to allow XML data portions stored on different nodes be combined and retrieved faster with the set of meta identifiers.

As per claim 7, Call teaches retrieving a sub-tree of the XML document ... - pars. 0018, 0023, 0070, 0091; root table and array – pars. 0089, 0091, 0375.

**Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Call (US 20020143521), Pic et al. (US 6988093), and further in view of Fogarasi et al. (US 6128619).**

As per claim 12, Call and Pic et al. do not teach Information Management System Database. However, Forgarasi et al. teach methods for accessing hierarchical databases – the title; data are in XML forms/pages – col. 5, lines 32-39; IMS database is well known in the art – col. 3, last paragraph. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Call's, Pic's and Forgarasi et al.'s teachings in order to utilize the available database.

Claims 13-20 claims similar subject matter as of claims 1-12 and are rejected based on the same ground of rejection.

### ***Response to Arguments***

Applicant's arguments filed 9/25/06 have been fully considered but they are not persuasive. Regarding the Applicants' argument that the reference to Call does not disclose mapping of a database field name to an XML element name. However, this is taught by Call at paragraph 0073 as cited in the office action. Call states: "An XML document as seen at 131 may be automatically validated and mapped into the item/field integer array structure by the builder after using the schema interpreter to translate the metadata in an applicable XML schema 128 into the metadata used by the database engine to manipulate items and fields."

Call also teach representation of the hierarchical structure of XML documents – pars. 0365-0368. The mapping and storage of the a XML elements to the hierarchical structure metadata used by the database engines – par. 0073. Thus, there is not only the representation of hierarchical structure of XML documents but also the associated representation of the hierarchical structure of the hierarchical database.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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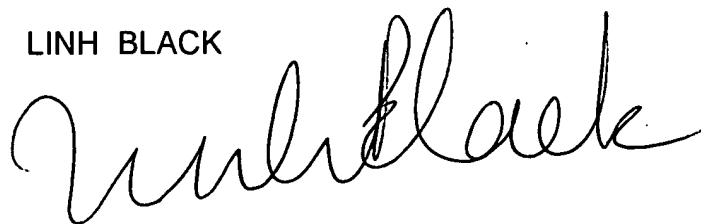
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINH BLACK whose telephone number is 571-272-4106. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LINH BLACK

A handwritten signature in black ink, appearing to read 'Linh Black', written in a cursive style.



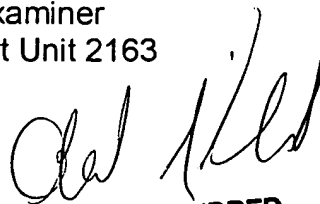
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December 07, 2006

Examiner  
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ALFORD KINDRED  
PRIMARY EXAMINER

~~ALFORD KINDRED~~  
~~PRIMARY EXAMINER~~